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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,540	11/14/2003	Yunbo Cao	M61.12-0546	2537

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EXAMINER

HWANG, JOON H

ART UNIT 2166 PAPER NUMBER

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/714,540

Applicant(s)

CAO ET AL.

Examiner

Joon H. Hwang

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/8/04</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. The pending claims are 1-30.

***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 21-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

"A computer-readable medium" in 1<sup>st</sup> line of claim 21 is insufficient to render the claims tangibly embodied in a manner so as to be executable. Page 11, line 9, thru page 12, line 13, define the media as including both storage media and communication media, thus being sufficiently broad so as to encompass intangible media such as communication media. Since claims 22-30 incorporate the deficiencies of claim 21, they are likewise rejected.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 5-7, 11-12, 15-17, 21-22, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buyukkokten et al. ("Seeing the Whole in Parts: Text Summarization for Web Browsing on Handheld Devices", WWW10, May 2-5, 2001, Hong Kong) in view of Chu-Carroll et al. (U.S. Publication No. 2003/0212686).

With respect to claim 1, Buyukkokten teaches receiving a document (i.e., receiving a web page, section 2. ALTERNATIVE STU REPRESENTATION METHODS on pages 2-4); segmenting the document into blocks of text (i.e., partitioning the web page into STUs, section 1. INTRODUCTION on pages 1-2); and generating at least one keyword and a summary for the document (i.e., *keyword/Summary*, section 2. ALTERNATIVE STU REPRESENTATION METHODS on pages 2-4). Buyukkokten does not explicitly disclose determining a file type for the document. However, Chu-Carroll teaches determining a file type for the document and parsing the document as a function of the file type (sections 66-67 on pages 4-5) in order to produce a valid parsed result. Therefore, based on Buyukkokten in view of Chu-Carroll, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Chu-Carroll to the system of Buyukkokten in order to produce a valid parsed result.

With respect to claim 2, Buyukkokten teaches segmenting includes using outline information to segment text in the document (i.e., partitioning based on paragraphs, lists, tag, or other structural information, section 2. ALTERNATIVE STU REPRESENTATION METHODS on pages 2-4).

With respect to claim 5, Buyukkokten teaches providing at least one keyword and a summary for each block of text in the document (i.e., *Keyword/Summary* for each STU, section 3.2 Extracting Summary Sentence on pages 5-6).

With respect to claim 6, Buyukkokten teaches displaying the at least one keyword and summary (fig. 4 on page 3 and section 2. ALTERNATIVE STU REPRESENTATION METHODS on pages 2-4).

With respect claim 7, Buyukkokten teaches generating at least one keyword and a summary for individual blocks of text within the document (i.e., *Keyword/Summary* for each STU, section 3 THE SUMMARIZATION PROCESS on pages 4-6).

With respect to claim 11, the limitations of claim 11 are similar to the limitations of claim 1 above. Buyukkokten further teaches retrieving a plurality of documents and providing an output of the at least one keyword and summary for each of the plurality of documents (i.e., web pages from the World-Wide Web, fig. 1 on page 1 and section 3. THE SUMMARIZATION PROCESS on pages 4-6). Therefore, the limitations of claim 11 are rejected in the analysis of claim 1 above, and the claim is rejected on that basis.

With respect to claim 21, the limitations of claim 21 are similar to the limitations of claim 1 above. Buyukkokten further teaches retrieving a document from a document source based on a document query request received from a mobile device (i.e., web pages from the World-Wide Web, fig. 1 on page 1 and section 3. THE SUMMARIZATION PROCESS on pages 4-6). Therefore, the limitations of claim 21 are rejected in the analysis of claim 1 above, and the claim is rejected on that basis.

The limitations of claims 12 and 22 are rejected in the analysis of claim 2, and these claims are rejected on that basis.

The limitations of claims 15 and 25 are rejected in the analysis of claim 5, and these claims are rejected on that basis.

The limitations of claims 16 and 26 are rejected in the analysis of claim 6, and these claims are rejected on that basis.

The limitations of claims 17 and 27 are rejected in the analysis of claim 7, and these claims are rejected on that basis.

6. Claims 3-4, 8-9, 13-14, 18-19, 23-24, and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buyukkokten et al. ("Seeing the Whole in Parts: Text Summarization for Web Browsing on Handheld Devices", WWW10, May 2-5, 2001, Hong Kong) in view of Chu-Carroll et al. (U.S. Publication No. 2003/0212686), and further in view of Chen et al. ("Detecting Web Page Structure for Adaptive Viewing on Small Form Factor Devices, WWW2003, May 20-24, 2003, Budapest Hungary).

With respect to claim 3, Buyukkokten and Chu-Carroll disclose the claimed subject matter as discussed above except segmenting including analyzing HTML tags in the document. However, Chen teaches segmenting includes analyzing HTML tags in the document and segmenting text in the document based on the HTML tags (Abstract on page 1 and section 3. PAGE ANALYSIS on pages 3-10) in order to improve the user's browsing experiences on a device with a small display. Therefore, based on Buyukkokten in view of Chu-Carroll, and further in view of Chen, it would have been

obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Chen to the system of Buyukkoken in order to improve the user's browsing experiences on a device with a small display.

With respect to claim 4, Chen further teaches segmenting includes using a position of text in the html document (section 3. PAGE ANALYSIS on pages 3-10). Therefore, the limitations of claim 4 are rejected in the analysis of claim 3 above, and the claim is rejected on that basis.

With respect to claim 8, Buyukkoken and Chu-Carroll disclose the claimed subject matter as discussed above except establishing potential segmentation points based on text in the document. However, Chen teaches establishing potential segmentation points based on text in the document (i.e., identifying content blocks from the semantic structure of a web page in an iterative manner, Abstract on page 1, section 2. OUR APPROACH on page 3, and section 3. PAGE ANALYSIS on pages 3-10) in order to improve the user's browsing experiences on a device with a small display. Therefore, based on Buyukkoken in view of Chu-Carroll, and further in view of Chen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Chen to the system of Buyukkoken in order to improve the user's browsing experiences on a device with a small display.

With respect to claim 9, Chen further teaches determining final segmentation points based on similarity of adjacent blocks of text surrounding the potential segmentation points (i.e., identifying content blocks from the semantic structure of a web page in an iterative manner, Abstract on page 1, section 2. OUR APPROACH on

page 3, and section 3. PAGE ANALYSIS on pages 3-10). Therefore, the limitations of claim 9 are rejected in the analysis of claim 8 above, and the claim is rejected on that basis.

The limitations of claims 13-14 and 23-24 are rejected in the analysis of claims 3-4, and these claims are rejected on that basis.

The limitations of claims 18-19 and 28-29 are rejected in the analysis of claims 8-9, and these claims are rejected on that basis.

7. Claims 10, 20, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buyukkokten et al. ("Seeing the Whole in Parts: Text Summarization for Web Browsing on Handheld Devices", WWW10, May 2-5, 2001, Hong Kong) in view of Chu-Carroll et al. (U.S. Publication No. 2003/0212686), and further in view of Emens et al. (U.S. Patent No. 6,493,744).

With respect to claim 10, Buyukkokten and Chu-Carroll disclose the claimed subject matter as discussed above except converting an audio file to a text document. However, Emens teaches converting an audio file to a text document (abstract and fig. 3) in order to create semantic units of the audio file. Therefore, based on Buyukkokten in view of Chu-Carroll, and further in view of Emens, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Emens to the system of Buyukkokten in order to create semantic units of a audio file.

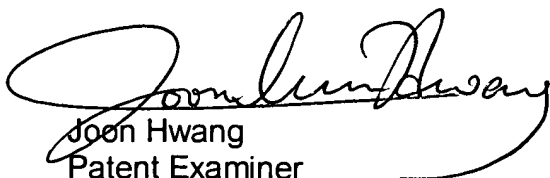
The limitations of claims 20 and 30 are rejected in the analysis of claim 10 above, and these claims are rejected on that basis.



8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joon H. Hwang whose telephone number is 571-272-4036. The examiner can normally be reached on 9:30-6:00(M~F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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6/9/06